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DEPARTMENT OF TRANSPORTATION

Pipeline and Hazardous Materials Safety Administration

[Docket No. PHMSA-2019-0149; PD-40(R)]

Hazardous Materials: The State of Washington Crude Oil by Rail Volatility

Requirements

AGENCY: Pipeline and Hazardous Materials Safety Administration (PHMSA), DOT.

ACTION: Notice of Administrative Determination of Preemption.

Applicants: The State of North Dakota and the State of Montana (Applicants)

Local Law Affected: Revised Code of Washington (RCW), Title 90, Chapter 90.56,

Section 90.56.565 (2015), as amended; Section 90.56.580 (2019).

Applicable Federal Requirements: Federal Hazardous Material Transportation Law (HMTA), 49 U.S.C. 5101 et seq., and the Hazardous Materials Regulations (HMR), 49 CFR parts 171-180.

Mode Affected: Rail.

SUMMARY:

PHMSA finds that the HMTA preempts Washington State's vapor pressure limit for crude oil loaded or unloaded from rail tank cars, for three reasons. First, the vapor pressure requirement constitutes a scheme for classifying a hazardous material that is not substantively the same as the HMR. Second, the vapor pressure requirement imposes requirements on the handling of a hazardous material that are not substantively the same as the requirements of the HMR. Third, PHMSA has determined that the vapor pressure requirement is an obstacle to accomplishing and carrying out the HMTA.

In addition, PHMSA finds that the administrative record regarding Washington State's Advance Notice of Transfer (ANT) requirement is insufficient to make a determination whether the requirement is preempted under the HMTA.

FOR FURTHER INFORMATION CONTACT: Vincent Lopez, Office of Chief Counsel, Pipeline and Hazardous Materials Safety Administration, U.S. Department of Transportation, 1200 New Jersey Avenue, SE, Washington, DC 20590; Telephone No. 202-366-4400; Facsimile No. 202-366-7041.

SUPPLEMENTARY INFORMATION:

I. Application

The Applicants have applied to PHMSA for a determination as to whether the HMTA, 49 U.S.C. 5101 *et seq.*, preempts the State of Washington's requirements for crude oil vapor pressure and advance notice of transfer for facilities that receive crude oil from a railroad car (hereinafter referred to as Washington's vapor pressure law or VPL). Specifically, the Applicants allege the law, which purports to regulate the volatility of crude oil loaded or unloaded from rail cars in Washington State, amounts to a *de facto* ban on Bakken¹ crude.

The Applicants present several arguments for why they believe Washington's law should be preempted. First, the Applicants contend that the law's prohibition on the loading or unloading of crude oil registering a vapor pressure greater than 9 pounds per square inch (psi) poses obstacles to the HMTA because compliance with the law can only be accomplished by (1) pretreating the crude oil prior to loading the tank car; (2)

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¹ According to the Applicants, North Dakota and Montana are home to the Bakken Shale Formation, a subsurface formation within the Williston Basin. It is one of the top oil-producing regions in the country and one of the largest oil producers in the world.

selecting an alternate mode of transportation; or (3) redirecting the crude oil to facilities outside of Washington State. Accordingly, North Dakota and Montana say these avenues for complying with the law impose obstacles to accomplishing the purposes of the HMTA. Similarly, they contend that the law's advance notice of transfer requirement is an additional obstacle. Lastly, North Dakota and Montana contend that Washington State's law is preempted because aspects of the law are not substantively the same as the Federal requirements for the classification and handling of this type of hazardous material.

In summary, the Applicants contend the State of Washington's vapor pressure law should be preempted because:

- It is an obstacle to the Federal hazardous material transportation legal and regulatory regime; and
- It is not substantively the same as the Federal regulations governing the classification and handling of crude oil in transportation.

PHMSA published notice of the application in the Federal Register on July 24, 2019. 84 FR 35707. Interested parties were invited to comment on the application. We granted a request by the State of Washington to extend the original 30-day comment period. The initial comment period closed on September 23, 2019, followed by a rebuttal comment period that remained open until October 23, 2019. PHMSA received 4,118 comments during the initial comment period, and another 279 comments were submitted during the rebuttal comment period. Generally, the comments fall into six categories representing a broad array of stakeholders, including refineries and oil producers,

industry groups, governmental entities, environmental groups, Members of Congress, and other interested members of the public. The comments are summarized in Part V below.

II. Preemption under Federal Hazardous Material Transportation Law

Preemption Standards.

The HMTA has strong preemption provisions that allow the Secretary of Transportation (Secretary), upon request, to make a preemption determination as to a non-Federal requirement. 49 U.S.C. 5125 contains express preemption provisions relevant to Washington State's vapor pressure law. Subsection (a) provides that a requirement of a State, political subdivision of a State, or Indian tribe is preempted – unless the non-Federal requirement is authorized by another Federal law or the Department of Transportation (Department or DOT) grants a waiver of preemption under 5125(e) – if:

- (1) complying with a requirement of the State, political subdivision, or tribe and a requirement of this chapter, a regulation prescribed under this chapter, or a hazardous materials transportation security regulation or directive issued by the Secretary of Homeland Security is not possible; or
- (2) the requirement of the State, political subdivision, or tribe, as applied or enforced, is an obstacle to accomplishing and carrying out this chapter, a regulation prescribed under this chapter, or a hazardous materials transportation security regulation or directive issued by the Secretary of Homeland Security.²

issuing inconsistency rulings under the original preemption provisions in Section 112(a) of the Hazardous Materials Transportation Act, Pub. L. 93-633, 88 Stat. 2161 (Jan. 3, 1975).

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² These two paragraphs set forth the "dual compliance" and "obstacle" criteria that are based on U.S. Supreme Court decisions on preemption. *Hines* v. *Davidowitz*, 312 U.S. 52 (1941); *Florida Lime & Avocado Growers, Inc.* v. *Paul*, 373 U.S. 132 (1963); *Ray* v. *Atlantic Richfield, Inc.*, 435 U.S. 151 (1978). PHMSA's predecessor agency, the Research and Special Programs Administration, applied these criteria in

Subsection (b)(1) of 49 U.S.C. 5125 provides that a non-Federal requirement concerning any of the following subjects is preempted—unless authorized by another Federal law or DOT grants a waiver of preemption—when the non-Federal requirement is not "substantively the same" as a provision of Federal hazardous material transportation law, a regulation prescribed under that law, or a hazardous materials security regulation or directive issued by the Department of Homeland Security:

- (A) the designation, description, and classification of hazardous material.
- (B) the packing, repacking, handling, labeling, marking, and placarding of hazardous material.
- (C) the preparation, execution, and use of shipping documents related to hazardous material and requirements related to the number, contents, and placement of those documents.
- (D) the written notification, recording, and reporting of the unintentional release in transportation of hazardous material and other written hazardous materials transportation incident reporting involving State or local emergency responders in the initial response to the incident.
- (E) the designing, manufacturing, fabricating, inspecting, marking, maintaining, reconditioning, repairing, or testing a package, container, or packaging component that is represented, marked, certified, or sold as qualified for use in transporting hazardous material in commerce.³

The preemption provisions in 49 U.S.C. 5125 reflect Congress's long-standing view that a single body of uniform Federal regulations promotes safety (including security) in the transportation of hazardous materials. Some forty years ago, when

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³ To be "substantively the same," the non-Federal requirement must conform "in every significant respect to the Federal requirement. Editorial and other similar *de minimis* changes are permitted." 49 CFR 107.202(d).

considering the Hazardous Materials Transportation Act, the Senate Commerce

Committee "endorse[d] the principle of preemption in order to preclude a multiplicity of

State and local regulations and the potential for varying as well as conflicting regulations
in the area of hazardous materials transportation." S. Rep. No. 1192, 93rd Cong. 2nd

Sess. 37 (1974). A United States Court of Appeals has found uniformity was the

"linchpin" in the design of the Federal laws governing the transportation of hazardous

materials.⁴

Administrative Determination of Preemption.

Under 49 U.S.C. 5125(d)(1), any person (including a State, political subdivision of a State, or Indian tribe) directly affected by a requirement of a State, political subdivision or Indian tribe may apply to the Secretary of Transportation for a determination whether the requirement is preempted. The Secretary of Transportation has delegated authority to PHMSA to make determinations of preemption.⁵

Alternatively, a person may seek a decision on preemption from a court of competent jurisdiction instead of applying to PHMSA. However, once an application is filed with the agency, an applicant may not seek judicial relief with respect to the same, or substantially the same issue, until the agency has taken final action on the application or 180 days after filing the application.⁶

Section 5125(d)(1) requires notice of an application for a preemption determination to be published in the Federal Register. Following the receipt and consideration of written comments, PHMSA publishes its determination in the Federal

⁴ Colorado Pub. Util. Comm'n v. Harmon, 951 F.2d 1571, 1575 (10th Cir. 1991).

⁵ 49 CFR 1 97(b)

⁶ 49 U.S.C. 5125(d); 49 CFR 107.203(d).

Register.⁷ A short period of time is allowed for filing of petitions for reconsideration.⁸ A petition for judicial review of a final preemption determination must be filed in the United States Court of Appeals for the District of Columbia or in the Court of Appeals for the United States for the circuit in which the petitioner resides or has its principal place of business, within 60 days after the determination becomes final.⁹

Preemption determinations do not address issues of preemption arising under the Commerce Clause, the Fifth Amendment or other provisions of the Constitution, or statutes other than the Federal hazardous material transportation law, unless it is necessary to do so in order to determine whether a requirement is authorized by another Federal law, or whether a fee is "fair" within the meaning of 49 U.S.C. 5125(f)(1). A State, local or Indian tribal requirement is not authorized by another Federal law merely because it is not preempted by another Federal statute. In addition, PHMSA does not generally consider issues regarding the proper application or interpretation of a non-Federal regulation, but rather how such requirements are actually "applied or enforced." Thus, "isolated instances of improper enforcement (e.g., misinterpretation of regulations) do not render such provisions inconsistent" with the Federal hazardous material transportation law, but are more appropriately addressed in the appropriate State or local forum. In the propertation of the pr

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⁷ 49 CFR 107.209(c).

⁸ 49 CFR 107.211.

⁹ 49 U.S.C. 5127(a).

¹⁰ Colorado Pub. Util. Comm'n v. Harmon, above, 951 F.2d at 1581 n.10.

¹¹ Preemption Determination (PD)-14(R), Houston, Texas, Fire Code Requirements on the Storage, Transportation, and Handling of Hazardous Materials, 63 FR 67506, 67510 n.4 (Dec. 7, 1998), decision on petition for reconsideration, 64 FR 33949 (June 24, 1999), quoting from IR-31, Louisiana Statutes and Regulations on Hazardous Materials Transportation, 55 FR 25572, 25584 (June 21, 1990), appeal dismissed as moot, 57 FR 41165 (Sept. 9, 1992), and PD-4(R), California Requirements Applicable to

III. The Washington State Requirements

For our purposes here, the relevant language of the law includes a new section added to RCW, Chapter 90.56 to read:

- (1)(a) A facility constructed or permitted after January 1, 2019, may not load or unload crude oil into or from a rail tank car unless the oil has a vapor pressure of less than nine pounds per square inch.
- (b) A facility may not load or unload crude oil into or from a rail tank car unless the oil has a vapor pressure of less than nine pounds per square inch beginning two years after the volume of crude oil transported by rail to the facility for a calendar year as reported under RCW 90.56.565 has increased more than ten percent above the volume reported for calendar year 2018.
- (2) The director may impose a penalty of up to twenty-five hundred dollars per day per rail tank car or the equivalent volume of oil for violations of this section. Any penalty recovered pursuant to this section must be credited to the coastal protection fund created in RCW 90.48.390.
- (3) This section does not: (a) Prohibit a railroad car carrying crude oil from entering Washington; (b) require a railroad car carrying crude oil to stop before entering Washington; or (c) require a railroad car carrying crude oil to be checked for vapor pressure before entering Washington.

RCW 90.56.580 (as amended).

In addition, RCW 90.56.565 was amended to read, in part:

(1)(a) A facility that receives crude oil from a railroad car must provide advance notice to the department that the facility will receive crude oil from a railroad car, as provided in this section. The advance notice must include the route taken to the facility within the state, if known, and the scheduled time, location, volume, region per bill of

Cargo Tanks Transporting Flammable and Combustible Liquids, 58 FR 48940 (Sept. 20, 1993), decision on reconsideration, 60 FR 8800 (Feb. 15, 1995).

lading, *type*, *vapor pressure*, and gravity as measured by standards developed by the American petroleum institute, of crude oil received. Each week, a facility that provides advance notice under this section must provide the required information regarding the scheduled arrival of railroad cars carrying crude oil to be received by the facility in the succeeding seven-day period. A facility is not required to provide advance notice when there is no receipt of crude oil from a railroad car scheduled for a seven-day period.

. . .

(4) To further strengthen rail safety and the transportation of crude oil, the department must provide to the utilities and transportation commission data reported by facilities on the characteristics, volatility, vapor pressure, and volume of crude oil transported by rail, as required under subsection (1)(a) of this section.

RCW 90.56.565 (as amended) (emphasis added).

IV. Background Information

A. Vapor Pressure.

No Federal Vapor Pressure Standard.

The HMR requirements for the classification of unrefined petroleum-based products include the proper classification, determination of an appropriate packing group, and selection of a proper shipping name and description of the material. The HMR contain detailed rules that guide an offeror through each of these steps in the classification process. *See generally*, 49 CFR 172.101 (The Hazardous Materials Table), 173.2 – 173.41; 173.120, 173.121, 173.150, 173.242, 173. 243, and Part 174 (Railroads). However, as explained further below, there is not a Federal vapor pressure standard for the classification process for unrefined petroleum-based products, such as crude oil.

North Dakota Industrial Commission Order.

In December 2014, the North Dakota Industrial Commission adopted new conditioning standards for the transport of Bakken crude oil, stating safety as its rationale. The NDIC Order (Order) sets forth operating standards guiding the use of conditioning equipment to separate production fluids into gas and liquid components. The new standard requires North Dakota operators to condition Bakken crude oil to a vapor pressure of no more than 13.7 psi. The Order requires the operators to separate light hydrocarbons from all Bakken crude oil to be transported and prohibits the blending of light hydrocarbons back into oil supplies prior to shipment. The NDIC, in setting the State of North Dakota's vapor pressure limit at 13.7 psi, noted that standards-setting organizations set crude oil stability at a vapor pressure of 14.7 psi. 12

DOT's High-Hazard Flammable Train Rule.

On May 8, 2015, PHMSA, in coordination with FRA, published the HHFT final rule to codify requirements to reduce the consequences and probability of accidents involving trains transporting large quantities of Class 3 flammable liquids. ¹³ PHMSA, in the Notice of Proposed Rulemaking (NPRM), indicated that the properties of unrefined petroleum-based products, including crude oil, are variable based on time, method, and location of extraction. As such, organic materials from oil and gas production represent a unique challenge regarding classification. At that time, the

¹² Commenters have suggested that since we are addressing the State of Washington's ability to set its own vapor pressure limit, we must also address the State of North Dakota's vapor pressure limit. However, the NDIC conditioning standard is not the vapor pressure requirement that is the subject of this preemption matter. Therefore, it is beyond the scope of this proceeding.

¹³ Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 80 FR 26643 (May 8, 2015).

agency also sought public comments on the role of vapor pressure in classifying flammable liquids and selecting packaging, and asked whether vapor pressure thresholds should be established. In the final rule, PHMSA took a system-wide comprehensive approach to rail safety commensurate with the risks associated with HHFTs. For example, the final rule adopted several operational requirements relating to speed restrictions, braking systems, and routing. It also adopted safety improvements in tank car design standards and notification requirements. And, to ensure the proper classification of unrefined petroleum products, a new regulatory requirement for a sampling and testing program was added to the HMR.

Under the HMR, it is the responsibility of the offeror to ensure hazardous materials are properly classified. PHMSA, in the HHFT final rule, stressed the offeror's responsibility to classify and describe properly a hazardous material when the agency decided to impose a regulation requiring a sampling and testing program for unrefined petroleum-based products. However, PHMSA did not adopt any other changes related to vapor pressure. For example, the agency did not mandate specific sampling and testing for measuring vapor pressure; it chose not to set a Federal vapor pressure standard; and lastly, it decided against requiring pre-treatment or conditioning of crude oil to meet a vapor pressure standard before the material is offered for transportation. Notwithstanding the fact that PHMSA did not adopt any specific requirements related to vapor pressure, the agency indicated its willingness to continue examining the role of vapor pressure in the proper classification of crude oils and other

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¹⁴ Hazardous Materials: Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains, 79 FR 45015 (August 1, 2014).

^{15 49} CFR 173.22.

^{16 49} CFR 173.41.

flammable liquids, but cautioned that any specific regulatory changes related to vapor pressure would be informed by current and future research, as well as rulemaking procedures to the extent regulatory action is deemed necessary.

New York State Office of the Attorney General Petition and ANPRM.

Subsequent to the publication of the HHFT final rule, and despite the operational and safety improvements codified in the rule, the New York State Office of the Attorney General (NYSOAG) petitioned PHMSA to establish a Federal vapor pressure limit for crude oil transported by rail. According to NYSOAG, the rule did not address the primary cause of the large explosions and uncontrollable fires from a series of train accidents involving Bakken crude oil—the volatility of crude oil itself—due to the abundance of combustible gases within the petroleum products. PHMSA received NYSOAG's petition on December 1, 2015. The rulemaking petition requested that PHMSA establish a vapor pressure limit of less than 9 psi for crude oil transported by rail. The petition was based on the premise that limiting the material's vapor pressure would reduce the risk of death or damage from fire or explosion in the event of an accident.

On January 18, 2017, PHMSA issued an ANPRM ¹⁷ to help the agency assess the merits of prescribing vapor pressure limits for crude oil. PHMSA, in the ANPRM, asked a series of questions seeking input as to whether there should be national vapor pressure thresholds for petroleum products. The comment period for the ANPRM closed on May 19, 2017.

¹⁷ Hazardous Materials: Volatility of Unrefined Petroleum Products and Class 3 Materials, 82 FR 5499 (January 18, 2017).

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Crude Oil Characteristics Research (Sandia Study).

In 2014, the Department, the U.S. Department of Energy (DOE), and Transport Canada (TC) commissioned a review of the chemical and physical properties of tight 18 crude oils in order to understand whether these properties could contribute to an increased potential for accidental combustion. Vapor pressure was one of the specific properties the two Federal agencies targeted for research and analysis. Sandia National Laboratories (Sandia) was commissioned to conduct an extensive review and analysis, focusing specifically on crude oil's potential for ignition, combustion, and explosion. The review encompassed a wide-ranging examination of domestic crude oil samples varying by type, location, sampling method, and analytical method. DOT, DOE, and TC authorized additional research and undertook a multi-phase deliberative approach for examining the characteristics of various crude oils from around the country. The final plan was authorized and provided for a four-phase study entitled, the Sampling, Analysis, and Experiment (SAE) plan.

The SAE plan consisted of a set of tasks intended to further evaluate sampling methods; identify and evaluate crude oil chemical and physical properties; and engage in data collection and analysis. Tasks 1, 2, and 3 of the plan have been completed: Task 1 consisted of a review and evaluation of new and emerging crude oil characterization data; Task 2 entailed an evaluation of oil sampling methods; Task 3 included combustion experiments and modeling to assess combustion hazards associated with tight and conventional crude oils.

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¹⁸ Tight oil is oil produced from petroleum-bearing formations with low permeability such as the Eagle Ford, the Bakken, and other formations that must be hydraulically fractured to produce oil at commercial rates. Shale is a subset of tight oil. U.S. Energy Information Administration, https://www.eia.gov/tools/glossary/?id=t (last visited February 11, 2020).

Sandia published its report of the results of Task 3 on August 24, 2019.¹⁹ The report described the pool fire and fireball experiments Sandia conducted on three different North American crude oil samples (including a sample from the Bakken region) to study the physical, chemical, and combustion characteristics of the samples, and how these characteristics associate with thermal hazard distances that may be realized in the event of a transportation accident involving a crude oil fire. In short, the primary conclusion reached from the study was as follows:

The similarity of pool fire and fireball burn characteristics pertinent to thermal hazard outcomes of the three oils studied indicate that vapor pressure is not a statistically significant factor in affecting these outcomes. Thus, the results from this work do not support creating a distinction for crude oils based on vapor pressure with regards to these combustion events.

In light of this conclusion, the Department, DOE, and TC agreed that additional data collection, the key focus of Task 4 of the SAE Plan, would not be necessary since the Task 3 results provided a scientific and evidentiary basis for evaluating the effects of vapor pressure as it relates to the safe transportation of crude oil by rail. As such, the sponsoring agencies officially deemed the publication of the Task 3 Report as the final stage of the SAE plan, thereby completing the Sandia Study. DOE submitted a Report to Congress in April 2020.²⁰

ANPRM Withdrawal.

PHMSA, after closely examining the results and conclusions of the Sandia Study, and in consideration of the public comments to the ANPRM from industry,

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¹⁹ https://www.osti.gov/biblio/1557808-pool-fire-fireball-experiments-support-us-doe-dot-tc-crude-oil-characterization-research-study.

²⁰ www.energy.gov/fe/report-congress-crude-oil-characterization-research-study.

stakeholders, and other interested parties, determined that issuing any regulation setting a vapor pressure limit for unrefined petroleum-based products is not justified, reasoning that such a regulation would not lessen risks associated with transporting crude oil by rail.

Furthermore, the agency determined that establishing a vapor pressure limit would unnecessarily impede transportation without providing justifiable benefits.

Therefore, on May 11, 2020, the agency withdrew the January 18, 2017 ANPRM because it determined that the current classification provisions of the HMR adequately address the known hazards of Class 3 flammable liquids, including unrefined petroleum-based products, such as crude oil. Furthermore, the agency found that a regulation setting a national vapor pressure limit for these materials is neither necessary nor appropriate.²¹

In light of the above summary of the regulatory and research activities concerning vapor pressure, PHMSA, with its withdrawal of the ANPRM, has now concluded that there is no scientific or evidentiary basis for regulating the vapor pressure of unrefined petroleum-based products, including crude oil. And although many of the commenters in this proceeding have referred to the State of North Dakota's vapor pressure standard as the "de facto national" standard, this characterization is entirely misplaced given that

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²¹ PHMSA has submitted a Notice of the ANPRM Withdrawal to the Office of the Federal Register for official publication. However, there may be a delay in the publication of the Notice in the Federal Register. Therefore, PHMSA has issued the Notice on the PHMSA website and posted it to the docket on the Regulations.gov website (https://www.regulations.gov/docket?D=PHMSA-2016-0077). Although PHMSA has taken steps to ensure the accuracy of the version of the Notice posted on the PHMSA website and in the docket, it is not the official version. Please refer to the official version in a forthcoming Federal Register publication, which will appear on the websites of each of the Federal Register (https://www.federalregister.gov/) and the Government Printing Office (www.govinfo.gov). After publication in the Federal Register, the unofficial Notice will be removed from PHMSA's website and replaced with a link to the official version published in the Federal Register. PHMSA will also post the official version in docket no. PHMSA-2016-0077.

NDIC's vapor pressure regulation is a State-adopted standard that could also be subject to a preemption challenge.

B. Advanced Notification of Transportation.

The HMTA and HMR prescribe the information and documentation requirements for the safe transportation of hazardous materials. This includes the preparation, execution, and use of shipping documents. Under the HMR, offerors of a hazardous material for transportation are required to prepare a shipping paper (to accompany the material while it is in transportation) with information describing the material, including the proper shipping name, hazard class or division number, and packing group, as determined by the regulations. Emergency response information is also required. Historically, in general, with the exception of radioactive materials, the Federal rules do not require additional information, documentation, or advance notification for the transportation of hazardous materials.

On May 7, 2014, the Department issued an Emergency Order requiring that each railroad carrier provide the State Emergency Response Commission (SERC) for each State in which it operates trains transporting one million gallons or more of Bakken crude oil, including information regarding the expected movement of such trains through the counties in the State. The notification must provide information regarding the estimated volumes and frequencies of train traffic. The notification must also provide a reasonable estimate of the number of trains that are expected to travel, per week, through each county, and the expected transportation routes; a description of the petroleum crude oil and all emergency response information, each in accordance with the requirements in the HMR; and contact information for at least one point of contact

at the railroad. The railroad must update the notifications when there is a material change (any increase or decrease of twenty-five percent or more) in the volume of those trains.

PHMSA, in the NPRM for the HHFT rulemaking, proposed to codify and clarify the requirements in the Emergency Order. However, based on the comments received on the proposed notification requirement, the agency did not codify the notification requirements from the Emergency Order. Rather, it elected to amend the existing planning requirements for transportation by rail to include HHFT trains. The agency reasoned that relying on the existing route analysis and consultation requirements of section 172.820 would provide for consistency of notification requirements for rail carriers transporting crude oil by seamlessly integrating HHFT trains within the existing hazardous materials regulatory scheme.

Thereafter, Congress enacted the FAST Act²² which included a mandate for the Department to promulgate regulations requiring advance notification consistent with the notification requirements of the May 7, 2014, Emergency Order. As such, PHMSA proposed, and ultimately codified those requirements in the Oil Spill Response Plan (OSPR) rulemaking.²³ The new provision, Section 174.312, specifies that HHFT information sharing notification must include: (1) a reasonable estimate of the number of HHFTs that the railroad expects to operate each week, through each county within the State or through each tribal jurisdiction; the routes over which the HHFTs will operate; (2) a description of the hazardous material being transported and all applicable

²² Public Law 114-94, 129 Stat. 1312, (December 4, 2015) Effective Date: October 1, 2015.

²³ Hazardous Materials: Oil Spill Response Plans and Information Sharing for High-Hazard Flammable Trains (FAST Act), HM-251B, NPRM 81 FR 50068 (July 29, 2016); FR 84 FR 6910 (February 28, 2019).

emergency response information required by subparts C and G of part 172; (3) at least one point of contact at the railroad with knowledge of the railroad's transportation of affected trains; and (4) if the route is subject to oil spill response plan requirements, the notification must include a description of the response zones and contact information for the qualified individual and alternate. Railroads are required to update the notifications for changes in volume greater than twenty-five percent.

In the final rule, the agency stated that adding these new HHFT information sharing requirements build upon the information sharing framework for HHFTs that were initiated at the same time as the HHFT rulemaking amendments. The agency noted that together, these requirements will enable the railroads to work with State officials to ensure that safety and security planning is occurring. The notification requirements adopted in the HHFT and OSRP final rules are important components of the Department's overall comprehensive approach to ensuring the safe transportation of energy products.

V. Summary and Discussion of the Public Comments

PHMSA received 4,118 comments during the initial comment period, and another 279 comments were submitted during the rebuttal comment period. Generally, there are six categories of commenters representing a broad array of stakeholders, including refineries and oil producers, industry groups, governmental entities, environmental groups, Members of Congress, and other interested members of the public. Of the

substantive comments received, the majority came from industry groups.²⁴ Several refineries and oil producers also submitted comments.²⁵

State and local governments also submitted comments, both in favor of and against preemption of the Washington State law. The North Dakota Department of Agriculture and the Governor of North Dakota each submitted a comment in favor of preemption. Also, the Attorneys General of Oklahoma, Arkansas, Indiana, Louisiana, Nebraska, Ohio, South Dakota, Utah, West Virginia, and Wyoming (AG Alliance for Preemption) wrote a joint comment in favor of preemption. The Attorney General (AG) of Washington and the Spokane City Council each submitted a comment arguing against preemption.

A joint comment was submitted by eight environmental and public interest groups, led by Earthjustice.²⁷ There were many comments submitted by individuals; the vast majority of which were variations of the same form letter.²⁸ In addition, 32

²⁴ 11 industry groups submitted individual comments, including: American Chemistry Council; American Fuel & Petrochemical Manufacturers; American Petroleum Institute; the Chlorine Institute; Dangerous Goods Advisory Council; International Liquid Terminals Association; North Dakota Petroleum Council; Railway Supply Institute; Western Independent Refiners Association; and Western States Petroleum Association. In addition, the Association of American Railroads, the American Short Line & Regional Railroad Association, and BNSF Railway Company submitted a joint comment.

²⁵ Of the five refineries located in Washington State, four of the refinery operators submitted comments: BP America; Hess Corporation; Marathon Petroleum Corporation; and Phillips 66 Company. Also, two oil producers submitted comments: Continental Resources and Crestwood Midstream Partners LP.

producers submitted comments: Continental Resources and Crestwood Midstream Partners LP. ²⁶ On December 16, 2019, The AG of Texas sent a letter to PHMSA's Chief Counsel endorsing the views expressed in the comments previously filed in the proceeding by the Attorneys General of Oklahoma, Arkansas, Indiana, Louisiana, Nebraska, Ohio, South Dakota, Utah, West Virginia, and Wyoming. The letter, and PHMSA's response, have been uploaded to the proceeding's docket.

²⁷ The environmental and public interest groups, included Earthjustice, the Washington Environmental Council, Columbia Riverkeeper, Friends of the Earth, the Lands Council, Friends of the San Juans, Friends of the Columbia Gorge, and Oregon Physicians for Social Responsibility.

²⁸ During the initial comment period, there were 3,737 form letters from 2,963 discrete commenters. There were also 59 comments from private citizens that were not form letters. During the rebuttal comment period, there were 268 form letters from 264 discrete commenters, as well as one comment from a private citizen that was not a form letter. After the rebuttal period closed, another 6 form letters were submitted from 5 discrete commenters.

Members of Congress wrote to the Secretary and the PHMSA Administrator urging preemption.

Five substantive rebuttal comments were submitted during the rebuttal comment period. The AG of Washington submitted a rebuttal comment against a finding of preemption. A joint rebuttal comment was also submitted against preemption from the Attorneys General of New York, California, Maryland, and New Jersey (AG Alliance against Preemption).

Three rebuttal comments were in favor of preemption. The API and the AFPM each submitted a rebuttal comment. The Applicants also submitted rebuttal comments.

The substantive comments are organized by topic and discussed in the following sections.

A. Comments Supporting Preemption.

Goal and Purpose of the HMTA.

Many of the commenters express concern about the precedent Washington State's law could set by undermining the HMTA's national scheme of uniform regulation. For example, Hess Corporation (Hess) points out that the original intent of the HMTA was to preclude a multiplicity of State and local regulations, and the potential for varying as well as conflicting regulations. Hess argues that while some States might believe their particular rules would be safer than those set forth by the HMTA or the HMR, Congress specifically rejected a State-by-State regulatory scheme in light of its determination that national uniformity ensures better safety than a patchwork of State and local laws of varying scope and degree.

Many of the commenters agree that uniformity is the cornerstone of Federal hazardous materials policy, rules, and regulation, because it fosters stability and ensures hazardous materials are transported efficiently and without unnecessary delay. The commenters on this topic all agree that the State of Washington's law violates the nation's scheme of uniform regulation for the transportation of hazardous materials.

Furthermore, most of the commenters agree that a piecemeal, or patchwork of State-by-State regulations is untenable. Crestwood Midstream Partners LP (Crestwood) envisions a system of regulatory arbitrage where without uniform standards, hazmat (hazardous materials) carriers will be forced to choose routes that avoid jurisdictions with expensive or burdensome compliance requirements. The Railway Supply Institute's Committee on Tank Cars (RSI-CTC) imagines a scenario where all fifty States require different equipment for transporting hazardous materials to and from their States, or imposing different classification restrictions on crude oil, ethanol, and other critical commodities.

Thus, the commenters overwhelmingly express concern that the law, if allowed to stand, would encourage other States to impose their own restrictions and requirements, creating a patchwork of requirements applicable to crude oil transport and handling, an outcome that undermines the uniform, comprehensive Federal regulatory framework that Congress sought to advance under the HMTA.

Marathon Petroleum Corporation (Marathon) asserts that the law undermines the validity of the unified Federal regime governing hazmat transportation, and upends the justified reliance on this regime by companies, like itself, that have invested heavily in their operations to ensure a stable, diverse, safe, and high-quality supply of crude oil with

which to serve the Pacific Northwest. Marathon notes that the interstate rail system is particularly vulnerable in the affected Northwest region because it and every shipper that utilizes the nation's rail system depends on a single national standard to govern rail transportation.

The Oklahoma AG, the North Dakota Department of Agriculture, Montana Petroleum Association, and the North Dakota Petroleum Council (NDPC), express concern that this type of law permits States with port cities, or points of access to particular transportation routes or hubs, to dictate national and foreign energy policy by imposing similar restrictions that ultimately impede another State's ability to move its natural resources to available markets. The Oklahoma AG notes the threat to landlocked States was of heightened concern since other States that may decide to employ the same rationale to deter the shipment of other fuels, such as natural gas from Oklahoma, or ethanol from Nebraska, would cause similar or greater injury than Washington State's vapor pressure law.

De Facto Ban.

Several commenters assert that the Washington State law amounts to a *de facto* ban on Bakken crude oil shipments because crude oil from the Bakken region typically has a vapor pressure in excess of 9 psi. To bolster this claim, other commenters point out that the law's legislative history clearly shows the legislature's intent to target Bakken crude by its frequent references to "Bakken" crude—and not any other types of crude—in its findings and justifications in earlier drafts of the law. Crestwood says the law is a

blatant effort by the legislature to cripple the crude-by-rail trade between the Bakken region and oil refineries located in Washington State under the guise of improving safety.

Furthermore, commenters assert that Washington State, in setting a vapor pressure limit of 9 psi, has created a separate regulatory regime that distinguishes between crude oil with a vapor pressure at or below 9 psi, and that with a vapor pressure above 9 psi, which essentially reclassifies crude oil with a vapor pressure above 9 psi as a material "forbidden" from transportation under the HMR. The Western States Petroleum Association (WSPA) agrees with this assessment of the law and adds that a separate regulatory regime will likely foster confusion and frustrate Congress's goal of developing a uniform, national scheme of regulation.

Moreover, the Association of American Railroads, the American Short Line and Regional Railroad Association, and BNSF Railway Co. (collectively AAR) and WSPA indicate that nothing can be done post-delivery to comply with the vapor pressure requirement. Therefore, the Washington State law effectively bans any transportation of high vapor pressure crude oil by rail within the State of Washington, as there would be no lawful means under the State law for unloading the material upon its arrival at Washington State refineries.

AFPM believes the law is not designed to reduce the number of combustion events within the State and increase safety, as Washington State claims, but is instead a backdoor attempt to prohibit Bakken crude from being refined within the State.

According to AFPM, prohibiting the unloading of crude oil with a vapor pressure above 9 psi will not prevent derailments of crude oil trains or mitigate the damage that such derailments cause. Serious large-scale impacts related to the transportation of hazmat by

rail typically does not occur during the loading or unloading phases of the material's journey. Since the law only regulates unloading and technically exempts transportation of high-vapor pressure crude through its jurisdiction, AFPM suggests the true motivation of this law is to prohibit the delivery of Bakken crude to Washington State refineries.

AFPM further hypothesizes that vapor pressure is a red herring here because Washington State is singling out Bakken crude while at the same time ignoring other Class 3 liquids with lower vapor pressures (ethanol, certain isomers of pentane, iso-octane, benzene, toluene, and the xylene isomers), which according to AFPM, have similar ignition risks because as flammable liquids, they can also burn under comparable circumstances.

AAR declares that even if the transportation risks to Washington State's citizens were legitimate, the State cannot export those risks to other States by limiting transportation of a disfavored product into its own State at the expense of forcing the transport presumably through another State.

The Description, Classification, and Handling of Hazardous Materials.

Hess, AFPM, AAR, and other commenters assert that the Washington State law attempts to regulate the packaging, handling, and documentation of crude oil with rules that plainly differ from existing Federal regulations. The commenters note that these areas are covered subjects under the HMTA; and therefore, remark that any non-Federal requirement concerning these subjects must be substantively the same as the Federal requirements, or otherwise they must be preempted. According to the commenters, preemption is appropriate because Washington State's law conflicts with the

comprehensive and technical classifications in the HMR and intrudes on the exclusive Federal role in classifying hazardous materials.

Description

The Dangerous Goods Advisory Council (DGAC) asserts that the definition of a flammable liquid imposed by Washington State is not substantively the same as the definition of the material under the HMR. Specifically, DGAC notes that the HMR does not impose a vapor pressure limit on flammable liquids.

Classification

NDPC and Continental Resources, Inc. (CLR) express their support for national uniformity and believe that allowing State specific laws to deviate from the HMTA's requirements directly undercuts its purpose of assuring a nationally uniform set of regulations applicable to the transportation of hazardous materials in commerce. Further, they note the HMR are not minimum requirements that other jurisdictions may exceed if local conditions warrant. Rather, the HMR are national standards and must be uniformly applied across jurisdictional lines. Here, they contend the Washington State law differs in material respects from the Federal requirements by classifying and regulating the handling of crude oil based on an arbitrary and unscientifically determined vapor pressure limit of no greater than 9 psi.

The Western Independent Refineries Association (WIRA), the AG of Oklahoma, WSPA, RSI-CTC, AFPM, AAR, and API seemingly agree with this assessment of the law, as they all assert that Washington State's vapor pressure requirement designates a new class of crude oil based on vapor pressure. The commenters reason that the law divides the single classification for crude oil, as defined in the HMR, into two groups:

crude oil with vapor pressure below 9 psi; and crude oil with vapor pressure equal to or exceeding 9 psi. According to the commenters, the law effectively reclassifies crude oil with a vapor pressure greater than 9 psi, which they argue essentially designates the material as "forbidden" for transportation because it imposes new classification and handling requirements whereas the Federal law does not. Others characterize the law as an outright ban of Bakken crude oil transport by rail.

Handling

WIRA, API, and others believe the law's handling provisions that restrict the loading and unloading of crude oil from rail cars based on vapor pressure limits are not substantively the same as the Federal requirements. Moreover, although the commenters acknowledge that the HMTA does not preempt non-Federal requirements that purport to only regulate loading and unloading operations at facilities after the material is no longer in transportation, they insist the Washington State law's scope is much broader because it regulates all loading and unloading at Washington State facilities, regardless of who performs the operations.

API says it is clear that the law regulates the handling of a hazardous material in a manner that is not substantively the same as the HMTA. Specifically, API says the law prohibits or limits (via caps on volume) the loading and unloading of crude oil from rail cars based on vapor pressure, whereas the HMR does not.

The Three Avenues of Compliance.

Generally, the commenters on this topic agree with the Applicants' notion that there are only three ways to comply with Washington State's vapor pressure limit for

crude-by-rail. As outlined in their application, North Dakota and Montana identified the three avenues of compliance as (1) pretreating the crude oil prior to loading the tank car; (2) selecting an alternate mode of transportation; or (3) redirecting the crude oil to facilities outside Washington State. RSI-CTC, WSPA, Crestwood, API, and others agree that requiring compliance with the law through pretreating, alternate modes of transportation, or rerouting outside Washington State would pose significant obstacles to the safety and national uniformity goals of the HMTA. For instance, RSI-CTC states that each of these methods would likely increase the risk of incident or exposure by unnecessarily extending the distance and time in transit. Crestwood points out that hazardous materials are inherently dangerous and thus must be transported without unnecessary delay. And API contends there are no commercially and logistically practical means to adapt to the limitations imposed by the law. Also, API says it can confirm that the Applicants' description concerning the unavailability, undesirability, and impracticality of the potential alternatives, is correct.

Pretreating

According to the commenters, the primary issue with pretreating the crude oil to meet Washington State's 9 psi vapor pressure limit is the lack of the necessary infrastructure and equipment needed to pretreat the crude adequately. NDPC and CLR allege the North Dakota oil and gas industry does not have adequate infrastructure in place to pretreat crude oil produced in the Williston Basin²⁹ to the specifications required by the Washington State law. NDPC estimates multiple stages of costly separation

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²⁹ The Williston Basin is a large "intracratonic sedimentary basin" in eastern Montana, western North Dakota, South Dakota, and southern Saskatchewan, that is known for its rich deposits of petroleum and potash. The geological basin underlies the oil producing region known as the Bakken.

equipment and tankage would need to be installed. API further explains that currently, oil conditioning is done at the wellsite to comply with the North Dakota Industrial Commission's order, ³⁰ but the wellsite equipment cannot be used to reduce consistently the vapor pressure of Bakken crude to meet Washington State's 9 psi limit. Therefore, API asserts this would require the processing of the oil in a "fractionator," equipment that it says is not economical to install at every wellsite. Instead, producers would have to redirect the crude oil to newly constructed facilities for processing. According to API, these facilities would essentially be small scale refineries that would need to be located at several points throughout the producing basin. This of course, as noted by the commenters here, will also result in increased handling, and additional transit time and miles traveled, collectively amounting to increased safety risks.

In light of the infrastructure, equipment, and other logistical issues, the commenters have concluded that pretreating is economically infeasible or unrealistic. According to the Governor of North Dakota, the infrastructure necessary to comply with the vapor pressure law would add hundreds of millions of dollars to the cost of conditioning and transporting. CLR, Crestwood, Hess, AFPM, API, and others all agree the various costs that producers would likely incur in order to comply with the Washington State vapor pressure limit make pretreating cost-prohibitive and simply not feasible.

Another significant issue the commenters raise is the fact that pretreating will result in a surplus of light-end materials separated during the pretreatment process. These

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³⁰ The North Dakota Industrial Commission Order sets forth operating standards guiding the use of conditioning equipment to separate production fluids into gas and liquid components. The standard requires North Dakota operators to condition Bakken crude oil to a vapor pressure of no more than 13.7 psi. The Order is discussed in more detail in Section VI.

higher vapor pressure hazardous materials, such as butane, ethane, and other natural gases, are deemed essential and valuable components of Bakken crude, or as standalone commodities. As such, the commenters explain that these components will likely still need to be transported to Washington State via rail or other available modes. For example, Crestwood predicts an unintended consequence of the law whereby trains departing North Dakota for Washington State will likely include more tank cars filled with a greater variety of hazardous materials due to pretreating. API echoes this sentiment, adding that more shipments will increase the total time in transit and quantity of miles traveled, all of which translates to an increased risk of a transportation incident.

Ultimately, the commenters agree that the additional pretreating requirements would create vast complexities and additional operational requirements that would greatly increase costs, lower efficiency, harm the environment, increase transportation, and reduce safety.

Alternate Modes of Transportation; Rerouting

WIRA, NDPC, and AFPM claim that alternatives to transporting North Dakota crude-by-rail, including transportation via pipeline, truck, or waterway, are simply not feasible. CLR states that utilizing alternate modes, or rerouting and potentially avoiding Washington State altogether, will run afoul of the purpose and thrust of the HMTA. WIRA also notes that using other modes or rerouting³¹ will likely impact neighboring jurisdictions.

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³¹ Commenters discussing the "rerouting" compliance option indicate it has many of the same issues already identified with respect to the alternate mode option, e.g., increased handling, additional miles traveled, longer transit times, and unnecessary delays.

Several commenters point out that all modes of transporting crude oil are not equal. API commented that the oil industry chose rail transport, and developed the infrastructure to support it, because it is the most efficient and cost effective means to transport Bakken crude oil safely from North Dakota and Montana to refineries in Washington State. Other modes are commercially infeasible and would increase complexity and safety concerns. For example, API and RSI-CTC estimate that diverting rail shipments to highway would result in a staggering number of trucks having to replace the current capacity of crude oil transported via rail. According to RSI-CTC, it would take three motor vehicle cargo tanks to transport the same amount of product from one rail tank car. In turn, this will necessarily increase the amount of hazmat shipments on the highway and create a greater potential for harm to persons, property, and the environment. According to API, switching to marine vessel is even worse, necessitating a circuitous trip through the Panama Canal and adding thousands of miles to the transportation journey.

These commenters are all in agreement on this point—whether by increasing the distance transported, the number of hazardous materials that will need to be transported, the number of loading and unloading events, the environmental impact of the underlying operations, or by causing unnecessary delays—the law presents increased risks and is an obstacle to accomplishing and carrying out the Federal hazmat law.

Sandia Study and Conclusions.

Commenters contend the Washington State law is misguided because its purported safety justification for mandating a vapor pressure limit for Bakken crude is

not supported by science. The commenters point to the Sandia Study³² and its recently reported findings and conclusions. DGAC, WIRA, NDPC, Marathon, Hess, AFPM, and others, contend that the results of the Sandia Study are conclusive, finding that vapor pressure is not a statistically significant factor in affecting pool fire and fireball characteristics. Crestwood interprets the findings to mean that Bakken crude with higher vapor pressure is not more unstable than crudes with lower vapor pressures. Hess notes the Sandia Study ultimately concluded that all the oil samples studied have comparable thermal hazard distances and none of the oils studied indicate outlier behavior. These commenters collectively assert that the advancement of rail safety is simply not furthered by requiring the alteration of a material's vapor pressure.

Moreover, the commenters claim the Sandia Study does not support creating a distinction for crude oils based on vapor pressure with regard to combustion events. According to WIRA, the recently completed study shows that regulating according to vapor pressure distinctions results in no measurable benefits in terms of transportation safety as compared to what is already covered under the existing Federal regulations, which are designed to ensure safe national transportation standards. NDPC believes that once packaged properly, vapor pressure levels have no additional impact on the safety effectiveness during the shipment of Bakken crude oil by rail tank car.

AFPM also avers that vapor pressure of petroleum crude oil in transportation has no impact on the frequency of derailments. Furthermore, although API recognizes the existence of genuine concerns generated by recent high profile rail incidents, it states that

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³² DOT and the U.S. Department of Energy commissioned Sandia Laboratories to conduct an extensive review and analysis of crude oil, focusing on its chemical and physical properties, and its potential for ignition, combustion, and explosion. The Sandia Study is discussed in more detail in Section VI.

the science, lessons learned, and investigations of those incidents have failed to reveal any casual connection between the vapor pressure of the product and the outcomes of the incidents.

RSI-CTC acknowledges that to date, PHMSA has not determined that it is appropriate to establish a vapor pressure standard for crude oil. Furthermore, Hess suggests there are other recent studies that support the Sandia Study's finding that characteristics of Bakken crude oil are similar to other crude oils. Accordingly, Hess recommends that PHMSA defer to those studies for accurate analytic information regarding the safety characteristics of Bakken crude oil. NDPC suggests the Sandia Study settles any lingering uncertainties – that is, vapor pressure does not need to be regulated, whether through a rulemaking by PHMSA or legislation from the State of Washington, in order to secure the safe transportation of the subject commodity via the nation's rail network.

B. Comments Opposing Preemption.

The Description, Classification, and Handling of Hazardous Materials.

The AG of Washington and Earthjustice commented on the Applicants' arguments regarding classification and handling. Their comments on these topics were essentially the same.

Classification

The commenters attempt to refute the Applicants' argument that the law effectively reclassifies petroleum crude oil with a vapor pressure greater than 9 psi. This assertion is simply not true according to the AG of Washington. He asserts that the law has no impact on the Federal crude oil classification requirements. Furthermore, the AG

of Washington contends that under the Washington State law's requirements, crude oil shipped to Washington State facilities will continue to be classified as a Class 3 hazardous material in accordance with the HMR. In addition, he argues that all other requirements (packaging, marking, labeling, and shipping papers) will remain unchanged. Handling

The commenters opposing preemption contend that the vapor pressure limit is not "handling" subject to preemption because it only impacts unloading activities at facilities after transportation had ended. According to the AG of Washington, the Washington State Department of Ecology (WADOE) is purportedly familiar with the facilities' unloading protocols. He describes a practice whereby facility personnel unload crude-by-rail shipments after the rail carrier delivers the tank cars and departs. After the facility unloads the crude oil, the rail carrier returns and retrieves the empty tank cars. Earthjustice's description of the unloading practices at Washington State facilities is the same. Here, the descriptions provided by the commenters are noteworthy because they purport to depict unloading operations that appear to be outside the scope of the HMTA. *The Three Avenues of Compliance*.

The AG of Washington and Earthjustice challenge the Applicants' arguments regarding the three purported avenues of compliance. Regarding pretreatment, the AG of Washington accuses the Applicants of overgeneralizing and impermissibly speculating when they suggest that all Washington State-bound crude oil will need to undergo cost-prohibitive offsite pretreatment. According to the AG of Washington, and supported by Earthjustice's comments, the average vapor pressure of Bakken crude is 11.81 psi.

Moreover, he references a research study that suggests some Bakken wellheads will

produce crude oil that already satisfies the 9 psi limit. Meaning, compliance can likely be achieved by conditioning the oil, which is relatively cheap. Earthjustice adds that oil producers are already performing some oil conditioning. Earthjustice also notes that at least one North Dakota pipeline operator will not accept crude oil with a vapor pressure greater than 9 psi for transportation.

Pretreating

The AG of Washington claims the Applicants' pretreatment argument rests on a double standard, considering the fact that North Dakota has already established its own vapor pressure limit through the North Dakota Industrial Commission (NDIC) order. He asks, if North Dakota can impose a vapor pressure limit, then why can't the State of Washington do the same? If North Dakota's limit is consistent with the HMTA, then why does Washington State's limit pose an obstacle?

Alternate Modes of Transportation

The AG of Washington and Earthjustice assert that the Applicants, beyond mere speculation, have not provided any evidence to support their position that a shift in the mode of transportation would have implications for crude oil transit time, distance traveled, number of transloading events, accident rates, and other factors that impact the safe transportation of hazardous materials. On this point, the commenters insist that a vague allusion to implications is not sufficient evidence.

Rerouting

The AG of Washington and Earthjustice dismiss the Applicants' argument that rerouting will create unnecessary delay in the transportation of hazardous materials. The AG of Washington contends that this argument fails because Washington State's law will

have no impact on transit time because it addresses loading and unloading at Washington State facilities; it does not regulate the movement of crude oil in any other way.

Regulates Facilities, not Transportation.

Generally, it is the position of commenters opposing preemption that the Washington State law only regulates activities performed at in-state facilities. According to the AG of Washington and Earthjustice, the law does not impose any requirements on rail carriers and it will have no direct impact on the Applicants. Specifically, regarding the vapor pressure requirement, Earthjustice claims it will have no direct impact on rail carriers and that it expressly does not prohibit a railroad car carrying crude oil from entering the State; nor does it require the trains to stop or be checked for vapor pressure before entering the State. Similarly, as with the vapor pressure limit, the commenters contend that the ANT requirement's compliance burden falls entirely on Washington State facilities. Thus, shippers and carriers do not submit ANT data and the Applicants, or any other States, do not have new duties under the law. Moreover, the AG of Washington indicated that a version of the ANT requirement has already been in effect in the State since 2015, and points out that neither North Dakota nor Montana challenged the law when it was originally enacted.

The commenters contend that the Applicants' claim that the vapor pressure limit's explicit purpose is to regulate the handling of hazardous materials during transportation by imposing volatility limits, is false. The AG of Washington and Earthjustice assert that the vapor pressure limit is not "handling" subject to preemption because it only impacts unloading activities at facilities after transportation had ended. As they explain it, the unloading practices at Washington State refineries exhibit something along the following:

facility personnel unload crude-by-rail shipments after the rail carrier delivers the tank car and departs. After the facility unloads the crude oil, the rail carrier returns and retrieves the empty tank cars.

Regulatory Gap.

The AG of Washington, Earthjustice, and individual commenters defend the law by claiming its vapor pressure limit addresses a regulatory gap in the Federal law and regulations governing the transportation of crude-by-rail. Earthjustice states that despite a number of well-documented oil train crashes and derailments, there is no Federal regulations limiting the volatility of crude oil shipped in railroad tank cars. Individual commenters agree, and characterize the perceived regulatory gap as PHMSA's failure to protect communities.

The AG of Washington alleges the Federal government has undertaken no serious effort to regulate vapor pressure. Furthermore, Earthjustice contends that PHMSA has failed to set a nationwide volatility standard, even though it has received a petition for rulemaking requesting that it set one.

The AG of Washington and Earthjustice explain that the State of North Dakota stepped in to address the regulatory gap in 2015, with the NDIC Order setting a vapor pressure limit of 13.7 psi to allegedly improve the safety of Bakken crude oil for transport. But according to the AG of Washington, the State of North Dakota's vapor pressure limit is insufficient to protect public safety because the threshold is too high and enforcement is lenient. Notwithstanding, the AG of Washington asserts that his State is under no obligation to honor the State of North Dakota's standard. And, since there is no

national standard, the commenters reason that Washington State is free to establish its own vapor pressure limit to fill a regulatory vacuum.

ANT Requirement.

The AG of Washington asserts the ANT requirement improves local emergency preparedness and therefore poses no obstacle to the HMTA. According to the AG of Washington, the law applies only to Washington State facilities that unload crude-by-rail shipments, and as such, rail carriers do not have duties under the law. Also, the AG of Washington states that the law does not conflict with the High-Hazard Flammable Train (HHFT) notification rules, 33 nor will it cause confusion among Washington State's emergency responders because responders will still rely on the material's emergency response information contained in the shipping papers. Finally, the AG of Washington argues the law does not regulate a pre-transportation function as alleged by the Applicants because it does not apply to shippers or carriers.

Earthjustice also attempts to refute the Applicants' case for preemption of the Washington State law. Earthjustice contends the law only applies to Washington State facilities, not railroads. Earthjustice argues that since there is no corresponding Federal ANT requirement, and Washington State's law does not apply to shippers or carriers, it cannot possibly pose an obstacle. As for the Applicants' objection to the ANT

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The HHFT notification rules specify that HHFT information sharing notification must include: (1) a reasonable estimate of the number of HHFTs that the railroad expects to operate each week, through each county within the State or through each tribal jurisdiction; the routes over which the HHFTs will operate; (2) a description of the hazardous material being transported and all applicable emergency response information required by subparts C and G of part 172; (3) at least one point of contact at the railroad with knowledge of the railroad's transportation of affected trains; and (4) if the route is subject to oil spill response plan requirements, the notification must include a description of the response zones and contact information for the qualified individual and alternate. Railroads are required to update the notifications for changes in volume greater than twenty-five percent. *See* 49 CFR 174.312.

requirement based on the theory it will be confusing to first responders, Earthjustice counters with the supposition that emergency responders should have the best and most complete information.

C. Rebuttal Comments.

Opposing Preemption.

The AG of Washington filed rebuttal comments. Also, the Attorneys General of New York, California, Maryland, and New Jersey (AG Alliance against Preemption) jointly filed their rebuttal comments.

The AG of Washington asserts that the Applicants lack authority to seek a preemption determination because they are not "directly affected" by the challenged laws. According to the AG of Washington, the question of standing is a threshold issue and he points out that none of the commenters supporting preemption, nor the Applicants, have adequately demonstrated that North Dakota and Montana satisfy this requirement. Furthermore, he cautions PHMSA that the agency has no discretion to disregard the standing question and that it risks judicial review if it proceeds despite the Applicants' lack of standing. Here, the AG of Washington reiterates his initial comment on this issue, e.g., that the Applicants are not directly affected because (1) the vapor pressure limit has not yet taken effect; (2) the potential impact to the Applicants' tax revenue is unduly speculative; and (3) a tax revenue impact is a classic indirect impact. For these reasons, the AG of Washington continues to assert that Washington State's vapor pressure limit has no direct impact on any opposing State's sovereign interests.

The AG of Washington also argues that PHMSA must separately determine that the Applicants have standing to challenge the law's ANT requirement, claiming the

Applicants made no connection between their respective sovereign interests and the ANT requirement. The AG of Washington submits that should PHMSA find the ANT requirement—alleged to be an entirely local safety measure—directly affects another State's sovereign interests, the agency will have rendered the standing requirement toothless. Notwithstanding the above standing question, it is the AG of Washington's position that the vapor pressure and ANT requirements are legitimate exercises of State authority that will improve public safety given the extreme risks of crude-by-rail transportation.

The AG of Washington further asserts the vapor pressure law is not an obstacle under the HMTA because it does not regulate the transportation of crude oil and is therefore not subject to preemption under the HMTA. Moreover, the AG of Washington argues that the law cannot be preempted under the HMTA's "substantively the same" test with respect to handling (loading and unloading) or classification, because the vapor pressure law regulates loading and unloading functions at facilities, after the crude oil has been delivered and transportation has ended. Regarding classification, the AG of Washington points out—contrary to the claims made by commenters in support of preemption that the law creates a new classification of crude oil based on vapor pressure—the law has no impact on the Federal classification requirements for crude oil. Crude oil shipped to Washington State refineries will still be classified as a Class 3 hazardous material in accordance with the HMR.

The AG of Washington also highlights the willingness of certain commenters to challenge Washington's vapor pressure law, while apparently not objecting to the State of North Dakota's vapor pressure limit. The AG of Washington believes both laws are valid

exercises of State authority given the absence of Federal action on the subject.

Furthermore, he suggests that a decision by PHMSA preempting Washington State's law would not only suppress innovation that would result from efforts to comply with Washington State's law, but also reward the State of North Dakota for winning a regulatory "race to the bottom" with its comparatively weak vapor pressure limit that seems to be regarded as the *de facto* national standard.

Also, the AG of Washington attempts to refute commenters' arguments that the Sandia Study disproved a link between vapor pressure and rail safety by noting the Sandia Study's pool fire and fireball experiments did not adequately consider ignition potential, which the AG of Washington says his State's vapor pressure limit is intended to address.

Finally, the AG of Washington contends the State's ANT requirement is not preempted because it is a local emergency preparedness measure that applies only to Washington State facilities. Furthermore, the AG of Washington dismisses claims that the requirement will create confusion for shippers and carriers, or that the ANT measures will result in additional requirements for hazmat shipping papers. According to the AG of Washington, local facilities have already been providing advance notice of crude oil shipments since 2015, without any major technical difficulties or confusion; and the new requirement will have no impact on shipping papers nor impose any additional compliance obligations on shippers and carriers.

The AG Alliance against Preemption filed its joint comments to respond primarily to the comments filed by the AG Alliance for Preemption, led by Oklahoma. The AG Alliance against Preemption supports the Washington State law and believes that in the

face of PHMSA's failure to adopt a Federal vapor pressure standard, it is entirely appropriate for States to take reasonable and necessary measures to protect communities, first responders, businesses, and natural resources within their respective borders.

The AG Alliance against Preemption, with regard to vapor pressure, indicates that despite Federal mandates, a petition for rulemaking, and PHMSA's publication of an Advanced Notice of Proposed Rulemaking on the petition, the agency has failed to close an "existing regulatory loophole" by either finalizing a vapor pressure rule or establishing an interim protective vapor pressure standard. In fact, the AG Alliance against Preemption asserts that rather than close the regulatory loophole, the Federal government's efforts have either lagged or actively moved to roll back critical safety protections for high-hazard flammable unit trains that transport crude oil across the country. For example, the AG Alliance against Preemption notes the Sandia Study is more than two years behind schedule; and it criticizes the August 2019 report as a "limited experiment" that does not inspire confidence in the project's planning, sampling, or analytical methods, or the report's conclusions. Moreover, the AG Alliance against Preemption asserts that the Department's recent regulatory reform actions will increase the likelihood, and dangerous consequences, of oil train accidents and derailments. Here, the AG Alliance against Preemption points to the recent withdrawal by the Federal Railroad Administration (FRA) of the 2-person crew ANPRM, and PHMSA's and FRA's decision not to include an electronically controlled pneumatic brakes requirement in the HHFT final rule.

According to the AG Alliance against Preemption, these regulatory failures coupled with known market failures in the rail sector that prevent or discourage actions to

improve the safety of transporting crude oil by rail, has created the situation today where States are filling this regulatory void by adopting their own protective vapor pressure standards.

Supporting Preemption.

The Applicants submitted their rebuttal to comments filed in opposition to their petition. In addition, API and AFRM each filed rebuttal comments.

The Applicants assert they have standing to bring this petition and characterize the AG of Washington's interpretation of the requirement as overly narrow and also contradictory of the agency's long-standing precedent of interpreting the standing requirement broadly. The Applicants claim that they will suffer several direct effects, including specific reductions in oil and gas severance tax revenue, and reductions in royalties received from producers, as the rightful landowners underlying oil and gas leases. In addition, they say both States will confront real and decidedly non-speculative safety, environmental, and economic effects associated with the additional pre-treatment requirements for Bakken crude oil or with the need to identify alternative modes and routes of transportation in order to comply with the law.

According to the Applicants, the State of North Dakota imposes an oil and gas severance tax. The State of North Dakota relies upon the resulting tax revenue to support its education system, its drinking water infrastructure development, and more. The Applicants contend that pretreatment of oil will devalue the product and alternative markets will yield lower returns and therefore generate lower tax revenues. Moreover, the Applicants state they are land grant States, meaning each State itself is the landowner

for several oil and gas leases throughout the Bakken region, generating direct royalties from oil and gas extraction operations occurring on State-owned land. As such, they contend the Washington State law will directly affect their royalty revenue.³⁴

Also, the Applicants say they will face multiple consequences associated with the construction of new infrastructure to meet Washington State requirements (pretreatment facilities and access roads), including environmental and safety consequences associated with the additional handling and movement of hazmat related to pretreatment.

Regarding the Applicants' standing for the notification requirement, they both argue that it is not appropriate for PHMSA to sever the ANT and vapor pressure requirements for the requisite preemption analysis—as suggested by the AG of Washington—because the ANT requirement enables the State to enforce its vapor pressure limit and accordingly, it must be examined in the context of the prescribed the limit.

API suggests the facts presented by the Applicants convincingly support a finding that the States of North Dakota and Montana are directly affected by the Washington State law. For example, API argues that certain changes required to pretreat Bakken crude oil to satisfy Washington State's vapor pressure limit will naturally impact the Applicants' energy economy and underlying infrastructure, and further, that it will increase handling and transportation of hazardous materials resulting in increased safety risks within both States. API also notes that the inability to treat Bakken crude oil to

³⁴ North Dakota estimates that it will lose an average of approximately \$32,000 per day from July 1, 2019 – June 30, 2020 (i.e., through the end of the current fiscal year) and an average of approximately \$36,000 per day thereafter through July 1, 2031, in lost oil and gas severance tax revenue as a result of the Washington Law (based on the market rate for Bakken crude oil in July 2019). See Docket No.: PHMSA-2019-0149; Document No.: 4397; at https://www.regulations.gov/document?D=PHMSA-2019-0149-4397.

comply with State of Washington's vapor pressure limit will inevitably result in lower commodity values or lost sales, corresponding to lost tax and royalty revenue for the Applicants. Moreover, API contends that additional facts showing the Applicants are directly affected include the comments submitted in this proceeding by Washington State refineries that attempt to refute the AG of Washington's claims that the law has no immediate or substantial effects or impacts on North Dakota and Montana companies that develop, produce, condition, and transport Bakken crude.

AFPM states the AG of Washington's argument that the Applicants' tax and revenue will not be reduced because Washington State refineries will simply turn to other sources of crude oil demonstrates a fundamental misunderstanding of the global petroleum market. According to AFPM, the options for Bakken crude oil producers and suppliers to market their crude oil are reduced as a result of the Washington State law. AFPM explains that due to the shortage of pipeline infrastructure, the majority of Bakken crude oil is transported by rail. AFPM suggests that should Washington State refineries stop receiving Bakken crude oil, it would likely still move by rail, but potentially at longer distances and at higher costs. This would reduce the value of the crude oil and therefore directly reduce the Applicants' State tax and royalty revenue. AFPM asserts that this outcome will have an immediate and harmful effect on the Applicants' interests, which stands in direct contradiction of the AG of Washington's assertion that the law will have no real-world effect.

AFPM informs PHMSA that as the leading trade association representing the refinery industry, it has standing to seek a preemption determination since its members are directly affected by Washington State's law. In fact, several AFPM members have

filed comments in this proceeding explaining how they are directly affected. Therefore, in the event the agency has concerns with the Applicants' standing, AFPM requests that the agency treat its comments in this proceeding as a separate application for a preemption determination on the Washington State law.

The Applicants attempt to refute the AG of Washington's contention that they have failed to provide sufficient evidence to support their petition. They argue the HMTA does not limit PHMSA's preemption consideration to the information presented in the original petition and that the administrative record is sufficient based on the contents of their application and the other relevant information received from other commenters' submissions.

Moreover, the Applicants note that commenters opposing preemption claim the law only regulates unloading of crude oil at facilities as opposed to handling of crude oil—and thus, is beyond the scope of the Federal law and regulations. However, the Applicants state that the vapor pressure limit is equally applicable to loading facilities in North Dakota and Montana, which is inherently a regulated function under the HMR. Furthermore, the Applicants point out that "unloading incident to movement" is an activity regulated by the HMR when performed by carrier personnel or in the presence of carrier personnel. As such, the Applicants assert that the Washington State law involves transportation regardless of whether a carrier is present and therefore, the challenged law seeks to regulate activities that include "loading incident to movement," a regulated function falling within the scope of the HMR.

API asserts that the AG of Washington misstates the purpose and nature of its vapor pressure law by stating that it applies only to unloading activities at facilities

located in Washington State, even though elsewhere in its comments the AG of Washington admits that the law was enacted to address the threats posed by crude-by-rail transportation. API notes that other commenters have conceded that the law targets the transportation of Bakken crude-by-rail and not the unloading of the material at facilities. API opines that the law's vapor pressure limit and prohibitions on unloading at facilities will severely curtail or eliminate rail transport of untreated Bakken crude into the State of Washington. As such, API states that PHMSA should reject Washington State's insincere and pretextual focus on "unloading" and preempt the law because, by its nature and purpose, it seeks to regulate transportation in a manner that is not substantively the same as, and that poses obstacles to the accomplishment of, the HMTA.

API claims the AG of Washington falsely asserts that the law has not taken effect and that its penalties do not affect rail transportation. According to API, the law's volume restriction for existing facilities currently applies to 2019 volumes. As such, facilities cannot ignore this cap simply because, once triggered, the total ban on further shipments and potential associated penalties do not take effect for two years. For example, API notes that at least one refinery has commented that it has already drastically reduced scheduled shipments to avoid exceeding the law's volume cap.

The Applicants argue the Washington State law fails the obstacle test because the State's self-styled three avenues of compliance actually increase the risk of an incident during transportation; cause unwarranted delay; and increase transit times. Here, the Applicants reiterate a primary argument they raised in their petition; that is, that there are only three avenues for compliance: pretreatment; seek alternative modes of transportation; or redirect the crude oil to facilities located outside of Washington State.

Regarding pretreatment, the Applicants note that multiple commenters have reinforced their arguments that pretreatment is cost prohibitive and existing conditioning infrastructure is insufficient to achieve Washington State's 9 psi vapor pressure limit. Furthermore, the Applicants state that pretreatment increases the inherent risk of an incident in transportation because the law ultimately requires additional handling and movement. The AG of Washington argues that the Applicants have failed to provide evidence of the anticipated increase in miles traveled due to pretreatment, re-routing, or modal shift. But the Applicants insist that the administrative record contains ample evidence that these activities will result in an increase of total miles traveled for hazardous materials.

The Applicants and AFPM attempt to refute the AG of Washington's argument that under Washington State's law, crude oil will still be classified as a "Class 3 Flammable liquid," just as it is classified under the HMR. According to the Applicants and AFPM, the Washington State law creates two classes of crude oil, one with vapor pressure below 9 psi and one with vapor pressure above 9 psi. The Applicants and AFPM contend this new classification essentially forbids the transportation of crude oil by rail because of the law's handling (loading and unloading) restrictions.

AFPM states that any argument asserting the Washington State law is beyond the scope of the Federal hazmat law because it only regulates unloading at facilities after transportation has ended, mischaracterizes the purposes of the Washington State law.

AFPM notes that commenters, in defense of the Washington State law, have conceded its intent is to regulate and address potential safety issues associated with the transport of Bakken crude by rail, not the unloading of the petroleum products at the facilities to

which they are shipped. AFPM points out the Washington State law does not address areas typically reserved to local police powers, such as worker safety, public health, and environmental safety. As such, AFPM contends that the law impacts transportation and is not just confined to unloading operations. Thus, AFPM has concluded the Washington State law starts regulating from the time Bakken crude, destined for Washington State facilities, is loaded onto rail cars in North Dakota and Montana. Notwithstanding, AFPM also notes that the Federal hazmat law and regulations include pre-transportation and transportation-related functions, including unloading operations.

The Applicants assert that the Washington State law is an obstacle to carrying out the purpose of the HMTA and does not enhance safety or fill a regulatory gap. The Applicants further contend that the Sandia Study Report underscores the conclusion that Washington's law is preempted and does not enhance safety. The Applicants believe the Sandia study is important for the following reasons: (1) it was commissioned by Federal agencies and conducted by a respected national laboratory; (2) it demonstrates in practical terms that a vapor pressure limit is within the province of a national inquiry and should therefore be left to determinations at the Federal level; and (3) it debunks the Washington State law's purported purpose of imposing a vapor pressure limit to improve public safety in the event of a crude-by-rail derailment. Simply stated, the Applicants conclude that the science does not support the assumption that regulating vapor pressure will mitigate the consequences of a derailment. The Applicants note that commenters supportive of the law rely on the findings from a 2014 DOT enforcement effort, rather than the latest comprehensive and scientific research study undertaken by Sandia National Laboratories. The Applicants highlight the fact that the report concluded that

vapor pressure is not a statistically significant factor in affecting pool fire and fireball burn characteristics. The applicants contend that the results of the study do not support a basis for creating a distinction among crude oils based on vapor pressure.

AFPM alleges that the AG of Washington's safety rationale for the Washington State law is not supported by science as evidenced by the Sandia Study and the recently completed Task 3 report. AFPM notes the commenters against preemption have failed to rebut the extensive scientific research that is included in this proceeding's administrative record. AFPM rejects the AG of Washington's argument that the Sandia Study is irrelevant because it allegedly does not examine the relationship between higher vapor pressure and ignition. AFPM points out that the Sandia Study concluded that ignition potential cannot be identified by a single index, and that vapor pressure is not a statistically significant factor in affecting the degree of thermal hazardous outcomes incident to a derailment scenario; and accordingly, there is no scientific basis for making regulatory distinctions based on vapor pressure levels. To the contrary, AFPM states that derailments typically produce ignition sources such as sparks from metal-on-metal stresses. The vapor pressure of a flammable liquid has no bearing on the likelihood of ignition or the frequency of derailment in these circumstances. Therefore, it is AFPM's position that Washington State and its supporters' heightened concerns about high vapor pressure ignition potential in a derailment scenario is entirely misplaced. AFPM dismisses the notion that any further research on Bakken crude oil vapor pressure is necessary given the comprehensive research and results contained in the Sandia Study.

AFPM notes that Earthjustice relies on data from the Department's initial examination of the crude-by-rail transportation system to support the proposition that

Bakken crude oil is uniquely dangerous. However, AFPM points out that DOT's earlier approach was driven by a lack of understanding, research and analysis, and that these limitations are now overcome by virtue of the Sandia Study, representing the most comprehensive and definitive scientific research on this issue. AFPM reiterates its contention that there is no regulatory gap here as alleged by the AG of Washington and other commenters. Rather, AFPM believes the Department has taken a measured and thorough approach in considering whether to regulate vapor pressure and as such, the Sandia Study effectively completes Federal research on this topic, and accordingly, the agency can now conclude that no additional regulation on vapor pressure limits is warranted.

VI. Discussion

A. The Applicants' Standing to Apply for a Preemption Determination.

The AG of Washington and other commenters opposing the application assert the Applicants lack standing to challenge Washington State's vapor pressure requirements.

The AG of Washington, Earthjustice, and other commenters believe the Applicants have not shown they are directly affected by the challenged law, as required by the HMTA.

According to the AG of Washington, the Applicants do not have standing because the vapor pressure limit has not yet taken effect; the potential impact to the Applicants' tax revenue is unduly speculative; and a decrease in tax revenue is a classic "indirect" impact.

Furthermore, the AG of Washington argues that irrespective of the Applicants' standing with respect to the requirement to set a vapor pressure limit, the agency must make a separate determination regarding the Applicants' eligibility to bring a challenge against the ANT requirement, and he claims the Applicants make no connection between their sovereign interests and that requirement.

The Applicants assert they have standing to bring this petition and characterize the AG of Washington's interpretation of the HMTA's standing requirement as overly narrow, stating that this view contradicts the agency's long-standing precedent of interpreting the standing requirement broadly. Furthermore, the Applicants, as landowners, contend they will suffer several direct effects including specific reductions in oil and gas severance tax revenue, and reductions in royalties received from oil producers. The Applicants explain that North Dakota and Montana are land grant States, meaning the States themselves are the landowners for several oil and gas leases throughout the Bakken region. Accordingly, they say each State receives direct royalties from oil and gas extractions occurring on State-owned land.

In addition, the Applicants assert that both States will confront real and "decidedly" non-speculative safety, environmental, and economic effects due to the State of Washington's requirements. American Petroleum Institute (API) and the American Fuel & Petrochemical Manufacturers (AFPM) agree that the Applicants have standing. They contend that the Applicants' submissions, as well as other comments filed in this proceeding, sufficiently demonstrate how the Applicants are directly affected. ³⁵ API also

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³⁵ AFPM notes in its rebuttal comments that it is a leading trade association representing the refinery industry and has associational standing consistent with long-standing agency precedent. Therefore, AFPM writes that in the event PHMSA has concerns with the Applicants' standing, AFPM has requested that the

notes the HMTA's preemption provision expressly grants States their own right to seek a preemption determination by its explicit reference to a "State" in the language authorizing who is eligible to apply.

Section 5125(d) authorizes "[a] person (including a *State*, political subdivision of a State, or Indian tribe) directly affected by a requirement of a State . . . " to apply for a determination of preemption. 49 U.S.C. 5125(d) (emphasis added). Under the "directly affected test," it must be determined whether the applicant will benefit by having the issues in its petition resolved. *See* Illinois Environmental Protection Agency's Uniform Hazardous Waste Manifest, 58 FR 11176, 11181 (Feb. 23, 1993). The agency has a long-standing practice of liberally construing this threshold requirement. Generally, the agency interprets the requirement broadly to advance the notion that important preemption issues (such as national uniformity of hazardous materials transportation regulation) are raised under the HMTA, and all parties engaged in hazmat transportation will be served by the agency addressing preemption issues. *See* PD-32(R), Maine Department of Environmental Protection Requirements on Transportation of Cathode Ray Tubes, 74 FR 46644, 46648 (Sept. 10, 2009), quoting from PD-2(R) at 11181.

PHMSA has considered petitions from applicants who are affected by non-Federal requirements in a variety of ways. We have said, for example, that if a "requirement applies to the applicant," the applicant need not show that it "is 'adversely affected,' 'aggrieved,' or has suffered 'injury' or 'actual harm." PD-12(R), New York

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agency treat its comments in the proceeding as a separate application for a preemption determination on the Washington State law. See Docket No.: PHMSA-2019-0149; Document No.: 4395; at https://www.regulations.gov/document?D=PHMSA-2019-0149-4395. PHMSA agrees. AFPM represents refineries that are regulated by Washington's law. Even if the Applicants were not directly affected, AFPM would be, and PHMSA could make a determination on that basis.

Department of Environmental Conservation; Requirements on the Transfer and Storage of Hazardous Wastes Incidental to Transportation, 60 FR 62527, 62532 (Dec. 6, 1995), decision on reconsideration, 62 FR 15970 (April 3, 1997). We have also held that a group of hazardous waste shippers could seek a determination with respect to a State law mandating that hazardous waste generators create a certain type of manifest. PD-2(R), 58 FR at 11182. And while enforcement issues, and how the non-Federal requirement is actually applied, are relevant to our preemption analysis under the obstacle test, these issues do not factor into whether an applicant is within the scope of those persons entitled to use the statute's administrative procedure for requesting a preemption determination. *Id.*

The plain language of the statute presupposes a State as a potential applicant. 49 U.S.C. 5125(d). Since a State will rarely if ever actually be subject to another State's law, the inclusion of States as applicants confirms that Congress used "directly affected" broadly. In this case, the only issue is whether the Applicants have made a sufficient showing that they are "directly affected" by the Washington State law. The Applicants have indicated they are land grant States, and as such, are landowners for several oil and gas leases throughout the Bakken region. According to the Applicants, North Dakota and Montana each receives direct royalties from oil and gas extractions occurring on Stateowned land. In addition, the Applicants assert that both States will confront real and "decidedly" non-speculative safety, environmental, and economic effects due to the Washington State requirements.

Based on information in the administrative record for this proceeding, it has been established that a majority of all the crude oil that leaves the Applicants' borders is

destined for refineries in Washington State. And, since the law purports to regulate the volatility of crude oil transported into Washington State for loading and unloading, it likely applies to crude oil shipments originating from the Applicants' holdings in the Bakken region. As such, the Applicants' quasi-sovereign interests over their natural resources are tangible interests that are directly affected by the State of Washington's law. Contrary to Washington's arguments, these effects are not too indirect or speculative under PHMSA's broad interpretation of "directly affected." PHMSA rejects Washington's contention that the Applicants are not directly affected because the vapor pressure limit has not yet gone into effect. This argument would deny standing to any applicant at this time, and would require the Applicants to file a new application at some point in the future; we do not believe that the Federal hazardous materials transportation law requires PHMSA to delay making a determination.

Moreover, regarding the ANT requirement, we do not accept the AG of Washington's bifurcated interpretation of the standing requirement, which would require us to make a separate determination of the Applicants' eligibility to challenge this section of the Washington State law. Here, the ANT requirement is an integral part of the overall statutory scheme providing for the State's new requirements addressing alleged safety concerns related to the transportation of crude oil by rail within the State. As such, the Applicants are directly affected by the entire legislative scheme, including the ANT requirement, and thus, have demonstrated substantial interests in the outcome of this proceeding to justify access to the administrative process.

In light of the above, the Applicants have provided sufficient information and an adequate factual basis to establish they are directly affected by Washington State's vapor

pressure and ANT requirements and, accordingly, are entitled to submit an application to PHMSA.

B. Vapor Pressure.

PHMSA finds that Washington State's vapor pressure limit is preempted. The requirement concerns both the "classification" and "handling" of hazardous materials and is not "substantively the same" as the Federal regulations, and is therefore preempted by 49 U.S.C. 5125(b)(1)(A). The requirement, moreover, is an obstacle to accomplishing and carrying out the HMTA and the HMR, and is therefore preempted by 49 U.S.C. 5125(a)(2).

Covered Subject Preemption – Classification.

The Applicants contend that Washington State's vapor pressure requirement designates a new class of crude oil based on its vapor pressure and that the State's requirement is not substantively the same as the HMR requirements for crude oil. PHMSA agrees.

Federal hazardous material transportation law preempts a non-Federal requirement on the "designation, description, and classification" of hazardous material that is not "substantively the same" as the Federal rules. 49 U.S.C. 5125(b)(1)(A).

The current HMR requirements for the classification of unrefined petroleum based products include proper classification, determination of an appropriate packing group, and selection of a proper shipping name and description of the material. The HMR contain detailed rules that guide an offeror through each of these steps in the classification process. *See generally*, 49 CFR 172.101 (The Hazardous Materials Table),

173.2 – 173.41; 173.120, 173.121, 173.150, 173.242, 173. 243, and Part 174 (Railroads). However, there is not a Federal vapor pressure standard for the classification of unrefined petroleum-based products, such as crude oil. The Washington State law has set a Statewide vapor pressure standard of 9 psi for unrefined petroleum-based products, such as crude oil.

Washington State's attempt to set a vapor pressure limit for crude oil constitutes a scheme for classifying hazardous materials that is not substantively the same as the HMR. Indeed, as noted further below, the Washington law is also squarely at odds with the agency's recent declaration that regulation of vapor pressure is neither necessary nor appropriate. The reasoning for this conclusion is more fully elaborated below. The Washington AG and other commenters contend that Washington's vapor pressure limit does not concern "classification" because it does not change the Federal classifications of crude oil. But the question under 49 U.S.C. 5125(b)(1)(A) is not whether a State law changes the Federal classifications of hazardous materials, but whether a State law imposes additional, different classifications. Washington's vapor pressure limit does just that, by creating a new class of crude oil that is subject to special requirements. The vapor pressure limit is therefore preempted under 49 U.S.C. 5125(b)(1)(A).

Covered Subject Preemption – Handling.

The Applicants also contend that by prohibiting facilities from loading or unloading crude oil into or from a rail tank car unless the oil has a vapor pressure of less than 9 psi, Washington has imposed a handling requirement that is not substantively the same as the HMR handling requirements for crude oil, and therefore is preempted. PHMSA agrees.

Loading and unloading fall within the scope of "handling," which is a covered subject for purposes of the HMTA preemption analysis. 49 U.S.C. 5125(b)(1)(B). Under the "substantively the same" test, a non-Federal requirement concerning a covered subject (i.e., handling), is preempted when it is not substantively the same as a requirement in the Federal hazmat law or regulation. 49 U.S.C. 5125(b)(1).

The Department has extensive regulations governing the handling of Class 3 flammable liquids, including loading and unloading, during transportation. *See generally*, 49 CFR 173.2 – 173.41, and Part 174 (Railroads). However, there is no specific Federal prohibition on the handling of crude oil with a vapor pressure greater than 9 psi. Washington State's crude oil by rail vapor pressure law imposes a vapor pressure requirement on the loading and unloading of crude oil where the Federal law does not.

The AG of Washington asserts that the State's vapor pressure requirement is not a handling regulation because it only regulates unloading functions at Washington State facilities after the crude oil has been delivered, transportation has ended, and the carrier has departed. He argues that because such post-delivery unloading is generally not regulated by the HMTA or HMR, the Washington law is not subject to preemption. As explained further below, PHMSA disagrees, as the AG of Washington does not accurately describe the Washington law, and ignores the law's significant upstream effects.

PHMSA, in prior preemption determinations, has confirmed that Federal hazardous material transportation law and the HMR apply to hazardous materials that are in transportation in commerce, including loading, unloading and storage that is incidental

to that transportation. *See* PD-9(R), California and Los Angeles County Requirements Applicable to the Onsite Handling and Transportation of Hazardous Materials, 60 FR 8774 (February 15, 1995), Decision on Petitions for Reconsideration, 80 FR 70874 (November 16, 2015) (a time-restriction for unloading tank cars was preempted because unloading activities are "handling," a covered subject); *see also* PD-12(R), New York Department of Environmental Conservation; Requirements on the Transfer and Storage of Hazardous Wastes Incidental to Transportation, 60 FR 62527 (December 6, 1995), Decision on Petition for Reconsideration, 62 FR 15970 (April 3, 1997) (secondary containment requirement for the transfer or storage of hazardous wastes at transfer facilities preempted because it created confusion as to the requirements in the HMR and increased the likelihood of non-compliance with the HMR). Furthermore, the agency has determined that non-Federal requirements that purport to regulate "facilities" are subject to preemption when those requirements affect transportation-related activities such as loading, unloading, and storage of hazard. *Id*.

Since those decisions, PHMSA, through rulemaking, has clarified the applicability of the HMR to specific functions and activities, including hazardous materials loading and unloading operations. PHMSA, in a rulemaking, defined "pretransportation function" to mean a function performed by any person that is required to ensure the safe transportation of a hazardous material in commerce. *See* "Applicability of the Hazardous Materials Regulations to Loading, Unloading, and Storage," HM-223, 68 FR 61906 (October 30, 2003); Response to Appeals, 70 FR 20018 (April 15, 2005).

Thus, loading functions fall within the scope of Federal regulations when performed by any person, *e.g.*, shipper or carrier, transporting a hazardous material. *Id.*

In addition, because carrier possession of a hazardous material is a key aspect of the definition of "transportation" under the HMR, loading functions that are performed by carrier personnel or by shipper personnel in the presence of the carrier are still considered "loading incidental to movement" and consequentially, are transportation functions. *Id.*

Regarding unloading, if carrier personnel are present during the unloading of packaged hazardous materials from a transport vehicle or the unloading of a bulk package, such as a cargo tank or a rail tank car, into a storage tank or manufacturing process, then the operation is considered "unloading incidental to movement" of the hazardous material, and accordingly, is subject to regulation under the HMR. *Id*

The State of Washington relies on the "carrier possession" distinction for determining the applicability of the HMR in defense of its vapor pressure law. It argues that "as a practical matter" the law only affects unloading activities at Washington facilities, that the "practice" at Washington facilities is to unload oil only after carrier personnel have departed, and that the law therefore only regulates activities not subject to the HMR. PHMSA disagrees, for two reasons. First, regardless of what Washington characterizes as standard "practice," the Washington law on its face does not apply only to unloading after a carrier departs. The law also applies to loading within the State, and to unloading in the presence of carrier personnel; as noted above, these activities are unquestionably covered by the HMTA and HMR.

Second, even though the law is written to only regulate loading and unloading at facilities in Washington, its practical effect is to regulate pre-transportation activities outside of Washington, as well as transportation itself. The administrative record and the facts contained therein as presented by numerous commenters, belies Washington State's

claim that the scope of the vapor pressure requirement is either narrow or local. For example, the Washington law does not specify how a facility is to determine whether the oil it is loading or unloading has a vapor pressure of less than 9 psi. As such, it is likely that the vapor pressure of crude oil received by the facilities will have to be provided by the shipper. This essentially means that the crude oil would have to be sampled, tested, and treated at the source of production before it is loaded onto rail cars, even though there is no Federal requirement for either measuring vapor pressure or pre-treatment.

Moreover, there is no Federal requirement for shippers of crude oil to communicate the material's vapor pressure to carriers or consignees when it is offered for transportation.

Any conditioning of Bakken crude oil to a vapor pressure of less than 9 psi is not a post-production process since the oil must be pretreated or conditioned at the point of production and before loading, which clearly is a pre-transportation function. Of greater significance is the fact that the oil cannot be conditioned at Washington State facilities before it is unloaded from the railcars.

In light of these facts, it is evident that upstream impacts are inevitable at the point of *origin* in the transportation network—and not downstream at the point of destination as the State of Washington contends. The reach of the State's legislative activity inevitably traces all the way back to the production activities to North Dakota and Montana. As such, we must find that the law imposes a requirement on shippers that was purposefully omitted from the current text of the HMR. Washington's law affects the handling and transportation of crude oil because the oil producers cannot load crude-by-rail destined for Washington State refineries unless it has a vapor pressure of not greater than 9 psi, and that requirement can only be satisfied at the point of production before the

material is placed into the transportation network. It is also noteworthy that there currently is no Federal requirement for shippers of crude oil to communicate a Class 3 material's vapor pressure to carriers or consignees downstream when it is offered for transportation.

Simply stated, before Washington State enacted this law, there were no special restrictions on the transportation of crude oil with a vapor pressure greater than 9 psi. However, after the law, handling, including loading and unloading, of crude-by-rail is directly affected, and potentially banned altogether unless it meets Washington State's vapor pressure requirement. Therefore, Washington State's vapor pressure limit is a transportation handling requirement that is not substantively the same as the Federal requirements covering the same subject. Moreover, in light of the agency's withdrawal of the ANPRM, the Department has taken specific action to not require vapor pressure limits. Accordingly, the Washington law cannot stand and is therefore preempted under 49 U.S.C. 5125(b)(1)(B).

Obstacle Preemption.

The Applicants contend that Washington's vapor pressure requirement is an obstacle to accomplishing and carrying out the HMTA and the HMR, and is therefore preempted under 49 U.S.C. 5125(a)(2). PHMSA agrees.

When Congress enacted the HMTA, it made several findings that emphasized the importance of uniform regulations governing the transportation of hazardous materials. For example, Congress noted that many States and localities had enacted laws and regulations which varied from Federal law and regulations pertaining to the transportation of hazardous materials, which created the potential for transferring

unreasonable hazards to other jurisdictions and created confusion for shippers and carriers attempting to comply with multiple and conflicting requirements. Due to the potential risks to life, property, and the environment posed by unintentional releases of hazardous materials, Congress determined that consistency in laws and regulations governing the transportation of hazmat was necessary and desirable, and that PHMSA's efforts to achieve greater uniformity are necessary to promote the public health, welfare, and safety at all levels. Thus, the Congress found it desirable that only Federal standards regulate the transportation of hazardous materials in intrastate, interstate, and foreign commerce. *See Colorado Pub. Util. Comm'n* v. *Harmon*, 951 F.2d 1571, 1580 (10th Cir. 1991).

In light of these Congressional findings, it is widely understood that a primary purpose of the HMTA is regulatory uniformity that will be achieved through the HMTA's preemption provisions. *Id.* Regulatory uniformity is frustrated when State and local governments adopt requirements like those at issue in this proceeding.

Several principles of regulatory uniformity have been developed through agency interpretations and case law. First, State and local requirements that impede hazardous materials transportation that is being conducted in accordance with the Federal requirements constitute inconsistent restraints on such transportation. Second, transportation carried out within the Federal framework of the HMTA and HMR is presumptively safe and additional State or local requirements concerning matters covered by Federal law or regulation are neither necessary nor appropriate. Finally, where the Department has examined an area otherwise within its authority to adopt regulations and has declined to regulate, State and local requirements in that area may be preempted

where they have adverse impacts on the Federal regulatory scheme and the transportation that occurs thereunder. *See generally*, PD-6(R), Michigan Marking Requirements for Vehicles Transporting Hazardous and Liquid Industrial Wastes, 59 FR 6186 (Feb. 9, 1994); Inconsistency Ruling (IR)-8, State of Michigan Rules and Regulations Affecting Radioactive Materials Transportation, 49 FR 46637 (Nov. 27, 1984), decision on appeal, 52 FR 13000 (April 20, 1987); IR-15(A), Vermont Rules for Transportation of Irradiated Reactor Fuel and Nuclear Waste, 49 FR 46660 (Nov. 27, 1984), decision on appeal 52 FR 13062, 13063 (April 20, 1987); quoted and followed, IR-19; IR-19, Nevada Public Service Commission Regulations Governing Transportation of Hazardous Materials, 52 FR 24404, 24407 (June 30, 1987), decision on appeal, 53 FR 11600 (April 7, 1988), affirmed in IR-19(A) and *Southern Pac. Transp. Co. v. Public Serv. Comm'n of Nevada*, 909 F.2d 352 (9th Cir. 1990), reversing No. CV-N-86-444-BRT (D. Nev. 1988).

In light of its jurisdictional responsibilities and consistent with court precedents, the Department has taken a system-wide approach to achieving safety of the Nation's transportation systems that includes regulatory and non-regulatory actions to ensure the safe and secure transportation of crude oil by rail. As previously discussed, these actions resulted in the addition of new sampling and testing requirements to the HMR; an assessment of the merits of setting a Federal vapor pressure limit; and the commissioning of the Sandia Study. The volatility and vapor pressure of crude oil have been important characteristics studied by the agency throughout this entire process.

PHMSA, after closely examining the results and conclusions of the Sandia Study (as discussed earlier in Section VI.A), and in consideration of the public comments to the ANPRM from industry, stakeholders, and other interested parties, withdrew the ANPRM.

PHMSA determined that issuance of any regulation setting a vapor pressure limit for unrefined petroleum-based products was not justified because such a regulation would not lessen risks associated with the transport of crude oil by rail. The agency's withdrawal of the ANPRM is the most definitive statement to the regulated community and the public that there is no need for a Federal regulation that sets a vapor pressure limit for unrefined petroleum-based products within the HMR.³⁶

In summary, the Department and PHMSA have pursued a comprehensive approach to address volatility of crude-by-rail, and have determined that existing Federal requirements are adequate to ensure the safe transportation of crude oil, particularly in light of the compelling conclusions of recent research activities discussed above. Therefore, State and local provisions that fundamentally alter the requirements for the same hazardous material are clearly obstacles to the accomplishment and execution of the objectives of the HMTA and HMR.

Having considered all of the implications of Washington State's unilateral regulatory action setting a vapor pressure limit for crude oil, the agency must conclude that the State's action epitomizes the type of patchwork State regulation that Congress sought to avoid when it enacted the HMTA and established a framework of uniform national regulations for regulating the transportation of hazardous materials. The Washington State vapor pressure requirement, if allowed to persist, would set an alarming precedent. Other State and local jurisdictions would be encouraged to enact their own vapor pressure limits for crude oil. The resultant multiple and conflicting requirements will undermine the uniform Federal regulatory scheme. Moreover, a

³⁶ See Supra note 21.

multitude of differing regulations in this area would surely create uncertainty and confusion for offerors. And the likelihood of copycat regulation of crude oil vapor pressure is not merely speculative as evidenced by the administrative record for this proceeding. PHMSA is aware of one State legislature that has introduced a similar bill regulating vapor pressure for oil or gas, and at least six States that have advocated for a vapor pressure limit.³⁷

Furthermore, a patchwork of varying and conflicting State and local regulations would likely increase risk by exporting potentially unreasonable hazards to other jurisdictions as offerors employ various avenues of compliance either through rerouting shipments; seeking alternate markets or modes of transportation; or avoidance of a jurisdiction altogether. This last option is particularly troubling as it resembles a *de facto* ban on transportation.

Proponents of the law insist Washington State has a legitimate public interest to protect its citizens from oil train fires and explosions, but in the context of the transportation of crude oil by rail, a State cannot use safety as a pretext for inhibiting market growth or instituting a *de facto* ban on crude oil by rail within its borders.

Notwithstanding the State of Washington's interest in the welfare and safety of its citizens, any State laws supporting those interests that implicate the transportation of hazardous materials, must not conflict with the objectives of the HMTA. Here, we find that the vapor pressure requirement is an obstacle to carrying out the HMTA and HMR –

February 12, 2020). In this proceeding, the Attorneys General of New York, California, Maryland, and New Jersey submitted comments against preemption. In addition, the Attorneys General of California, Illinois, Maine, and Maryland filed joint comments with the Attorneys General of New York and Washington, supporting a national vapor pressure standard in the ANPRM proceeding.

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³⁷ See House Bill 4105, 80th Oregon Legislative Assembly – 2020 Regular Session (February 3, 2020), https://olis.leg.state.or.us/liz/2020R1/Downloads/MeasureDocument/HB4105/Introduced (last visited

it not only hinders the movement of hazardous materials but also creates unnecessary delays in direct conflict with HMTA. Accordingly, the law is preempted.

C. ANT Requirement.

One remaining question before the agency is whether Washington State's ANT requirement regulates the same subject covered by the Federal requirements for the requisite shipping paper's material description and emergency response information, and if so, whether the State's requirement is substantively the same as the HMR requirements for crude oil. Alternatively, we must consider whether Washington's ANT requirement is inconsistent with the HMR rule governing HHFT information sharing notification for emergency response planning, or is otherwise an obstacle to accomplishing and carrying out the HMTA.

Federal hazardous material transportation law preempts a non-Federal requirement for the "preparation, execution, and use of shipping documents" and "requirements related to the number, content, and placement" of those documents, that are not "substantively the same" as the Federal rules. 49 U.S.C. 5125(b)(1)(C).

The HMTA and HMR prescribe the information and documentation requirements for the safe transportation of hazardous materials. *See generally*, 49 CFR part 172, subparts C and G; part 174 (railroads). This includes the preparation, execution, and use of shipping documents. Under the HMR, offerors of a hazardous material for transportation are required to prepare a shipping paper to accompany the material while it is in transportation with information describing the material and emergency response information. In general, the Federal rules do not require additional information,

documentation, or advance notification for the transportation of hazardous materials. PHMSA recently adopted new HHFT information sharing requirements in order to ensure that safety and security planning is occurring for crude-by-rail shipments. 49 CFR 173.41. The information sharing requirements include a weekly estimate of the number of trains expected to operate through the local jurisdiction, a description of the hazardous material and all applicable emergency response information (consistent with the HMR requirements), and a railroad point of contact. Updates are only required when volume changes more than twenty-five percent. *Id*.

We note that Washington State amended the ANT requirement to add new data elements, "type" and "vapor pressure" to the ANT database. Before this amendment, the data elements that were being reported generally consisted of the same data that is required under the HHFT notification requirements. For example, route, product description, and quantity. It is noteworthy, that this information is either necessary or optional information under the HMR, or otherwise ascertained from the shipping paper that is required to accompany a shipment of crude oil—except vapor pressure. Similarly, with the addition of these new data elements and the different reporting threshold, the ANT requirement is different from the HHFT notification requirements, albeit not to the extent that commenters have described it.

The State of Washington asserts that the ANT requirement is a local emergency preparedness measure that applies only to in-state facilities that unload crude-by-rail shipments, with no attendant reporting duties for shippers or carriers. Yet, it is unclear from where, and whom, the facilities will get the crude oil's "type" and "vapor pressure" data in order to comply with the amended ANT requirement. A reasonable inference

Notwithstanding, we cannot ignore the fact that none of the refineries that submitted comments in this proceeding provided any meaningful information regarding how they have been complying with the current iteration of the requirement, or how they intend to comply with the amended law. Without more information, it is unclear whether there is a sufficient nexus to the ANT requirement and the Federal requirements that fully implicates HMTA preemption. Therefore, on balance, PHMSA finds that the administrative record regarding the ANT requirement is insufficient to make a determination whether the requirement is preempted under the HMTA.

VII. Ruling

PHMSA finds that Washington State's vapor pressure requirement setting a vapor pressure limit of 9 psi for crude oil, has created a scheme for classifying a hazardous material that is not substantively the same as the Federal hazardous materials regulations. PHMSA also finds that the vapor pressure requirement is a handling requirement that is not substantively the same as existing Federal requirements. Furthermore, PHMSA has determined that the vapor pressure requirement is an obstacle to accomplishing and carrying out the HMTA and HMR, and is, therefore preempted.

In addition, PHMSA finds that the administrative record regarding the ANT requirement is insufficient to make a determination whether the requirement is preempted under the HMTA.

VIII. Petition for Reconsideration/Judicial Review

In accordance with 49 CFR 107.211(a), any person aggrieved by this

determination may file a petition for reconsideration within 20 days of publication of this

determination in the Federal Register. If a petition for reconsideration is filed within 20

days of publication in the Federal Register, the decision by PHMSA's Chief Counsel on

the petition for reconsideration becomes PHMSA's final agency action with respect to the

person requesting reconsideration. See 49 CFR 107.211(d).

If a person does not request reconsideration in a timely fashion, then this

determination is PHMSA's final agency action as to that person, as of the date of

publication in the Federal Register.

Any person who wishes to seek judicial review of a preemption determination

must do so by filing a petition for review in the United States Court of Appeals for the

District of Columbia Circuit, or in the United States Court of Appeals for the circuit in

which the petitioner resides or has its principal place of business, within 60 days after the

determination becomes final with respect to the filing party. See 49 U.S.C. 5127(a).

The filing of a petition for reconsideration is not a prerequisite to seeking judicial

review of this decision under 49 U.S.C. 5127(a).

Issued in Washington, DC, on May 11, 2020.

Paul J. Roberti,

Chief Counsel.

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